Serial No.: 10/082,973

Filed: February 26, 2002

Page : 2 of 8

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

<u>Listing of Claims</u>:

- 1. -38. (Cancelled).
- 39. (Currently amended) A recombinant nucleic acid comprising a nucleotide sequence encoding an autocatalytically cleaving ribozyme and a trans-acting ribozyme, wherein said nucleotide sequence is operably linked to a tissue-specific promoter, wherein said autocatalytically cleaving ribozyme comprises a first arm of complementary sequence and a second arm of complementary sequence, wherein the cleavage site of said autocatalytically cleaving ribozyme is located between said first and second arms, and wherein the sum of the number of nucleotides of said first and second arms is from 25 nucleotides to 53 nucleotides the number of nucleotides in one of said first arm and said second arm is about 20 nucleotides.
- 40. (Currently amended) The recombinant nucleic acid of claim 39, wherein said nucleotide sequence encodes an RNA molecule having the structure of a pChop cassette as set forth in Figure 3 or Figure 4.
- 41. (Currently amended) The recombinant nucleic acid of claim 39, wherein said nucleotide sequence encodes an RNA molecule having the structure of a pSnip cassette as set forth in Figure 4.
- 42. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid comprises an origin of replication.

Serial No.: 10/082,973

Filed: February 26, 2002

Page : 3 of 8

43. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid encodes more than one trans-acting ribozyme.

- 44. (Previously presented) The recombinant nucleic acid of claim 43, wherein the transacting ribozymes are targeted to different sites on the same target-RNA.
- 45. (Previously presented) The recombinant nucleic acid of claim 43, wherein the transacting ribozymes are targeted to different target-RNAs.
- 46. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid encodes more than one ribozyme cassette.
- 47. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid encodes at least two different ribozymes cassettes.
- 48. (Previously presented) The recombinant nucleic acid of claim 39, wherein said recombinant nucleic acid encodes more than one copy of a ribozyme cassette.
- 49. (Previously presented) The recombinant nucleic acid of claim 39, wherein said transacting ribozyme is targeted to a transcript selected from the group consisting of: pol II, HBV, pol III, RB, IGF1, SH, pol I, HPV, C3, C9, B2, Tel, TGFβ, CAT, PpaRα, p4501E1, AR, and SF1 transcripts.
- 50. (Previously presented) The recombinant nucleic acid of claim 39, wherein said nucleotide sequence encodes a hairpin loop.
- 51. (Previously presented) The recombinant nucleic acid of claim 39, wherein said nucleotide sequence encodes multiple ribozyme cassettes linked together by at least 4 nucleotides.

Serial No.: 10/082,973 Filed: February 26, 2002

Page : 4 of 8

52. (Previously presented) The recombinant nucleic acid of claim 39, wherein said tissue-specific promoter is a K4 promoter, K7 promoter, K13 promoter or albumin promoter.

- 53. (Currently amended) An isolated cell containing a recombinant nucleic acid comprising a nucleotide sequence encoding an autocatalytically cleaving ribozyme and a trans-acting ribozyme, wherein said nucleotide sequence is operably linked to a tissue-specific promoter, wherein said autocatalytically cleaving ribozyme comprises a first arm of complementary sequence and a second arm of complementary sequence, wherein the cleavage site of said autocatalytically cleaving ribozyme is located between said first and second arms, and wherein the sum of the number of nucleotides of said first and second arms is from 25 nucleotides to 53 nucleotides the number of nucleotides in one of said first arm and said second arm is about 20 nucleotides.
- 54. (Currently amended) A virion comprising a recombinant nucleic acid comprising a nucleotide sequence encoding an autocatalytically cleaving ribozyme and a trans-acting ribozyme, wherein said nucleotide sequence is operably linked to a tissue-specific promoter, wherein said autocatalytically cleaving ribozyme comprises a first arm of complementary sequence and a second arm of complementary sequence, wherein the cleavage site of said autocatalytically cleaving ribozyme is located between said first and second arms, and wherein the sum of the number of nucleotides of said first and second arms is from 25 nucleotides to 53 nucleotides the number of nucleotides in one of said first arm and said second arm is about 20 nucleotides.
- 55. (Currently amended) A liposome composition comprising a recombinant nucleic acid comprising a nucleotide sequence encoding an autocatalytically cleaving ribozyme and a transacting ribozyme, wherein said nucleotide sequence is operably linked to a tissue-specific promoter, wherein said autocatalytically cleaving ribozyme comprises a first arm of complementary sequence and a second arm of complementary sequence, wherein the cleavage site of said autocatalytically cleaving ribozyme is located between said first and second arms, and wherein the sum of the number of nucleotides of said first and second arms is from 25

Serial No.: 10/082,973

Filed: February 26, 2002

Page : 5 of 8

nucleotides to 53 nucleotides the number of nucleotides in one of said first arm and said second arm is about 20 nucleotides.